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10/639,053

08/11/2003

Arghya T. Mukherjee

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DALLAS, TX 75201-2980

EXAMINER

NGUYEN, MINH DIEU T

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/639,053

Applicant(s)

MUKHERJEE ET AL.

Examiner

Minh Dieu Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/11/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 8/11/2003 has been placed in the application file and the information referred to therein has been considered as to the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-8, 10-13, 15-18 and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang (6,810,259).

a) As to claim 1, Zhang discloses an apparatus for executing authentication in a network environment (i.e. users are authenticated see Zhang, col. 8, lines 56-59) comprising: a packet gateway (e.g. base station, see Zhang Fig. 3A, element 114) operable to retrieve a group profile (e.g. local subscriber list includes a plurality of local subscriber cache entries, each being associated with a subscriber, see Zhang, Fig. 4A, element 150; col. 21-38) from an authentication, authorization, and accounting (AAA)

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server (e.g. central database system includes a subscriber management system, a billing system and a network management system, see Zhang col. 7, line 62 to col. 8, line 21) in response to receiving a request from a first end user (i.e. a subscriber signs on to the network, see Zhang col. 8, lines 40-45; base station retrieve subscriber profile from the central database, see Zhang, col. 8, lines 51-55) and to locally cache the group profile (i.e. the profile is stored in a local cache database of the base station, see Zhang, Fig. 3B, element 132), the packet gateway being operable to provide a service to the first end user based on information included within the group profile and associated with the first end user (see Zhang, col. 8, lines 56-60), wherein the packet gateway is further operable to receive a request from a second end user (i.e. Zhang discloses managing subscriber profile information associated with each of a plurality of mobile hosts of the network (Fig. 3A, element 120), so inherently understood there are requests from a plurality of mobile hosts, see Zhang col. 30, lines 11-14) and to determine if the second end user is included within the group profile such that in cases where the second end user is included in the group profile (i.e. base station searches local profile list to determine whether the profile associated with the new host is found in the local subscriber list, if so the base station reads the profile associated with the new host from the local cache database, see Zhang Fig. 10A, elements 1004, 1006, 1008; col. 30, lines 25-34), the packet gateway can locally cache the group profile in order to provide a service to the second end user without having to communicate with the AAA server (see Zhang col. 5, lines 34-41; col. 8, lines 12-19).

b) As to claim 3, Zhang discloses if the second end user is not in the group profile associated with the first end user, then the packet gateway may initiate a request to the AAA server in order to attempt to identify a profile associated with the second end user (i.e. if it is determined that the new host is not found, the base station requests a copy of the subscriber profile associated with the new host from the central data base, see Zhang, col. 32, lines 18-24).

c) As to claim 4, Zhang discloses the group profile associated with the first end user is maintained at the owner base station for a period of time before the group profile is expired and deleted by the base station (i.e. it is understood the group profile has expiration time and is later identified as having expired) and the purpose of maintaining the group profile after the subscriber has signed off from the network is to avoid having to query the central database in the event the subscriber turns the handset back on after a short period of time (i.e. it is understood if the group profile associated with the first end user is expired, the base station needs to query the central database for a valid profile that corresponds to the first end user) (see Zhang col. 11, lines 15-32).

d) As to claim 5, Zhang discloses wherein each group profile includes an expiration time such that if the group profile is identified as having expired, it may be expunged (see Zhang, col. 4, lines 1-4).

e) As to claim 6, Zhang discloses a centralized server (e.g. central server computer system, see Zhang Fig. 3A, element 106) operable to store a plurality of group profiles (i.e. storing subscriber profile information associated with each subscriber

of the network, see Zhang, col. 7, lines 62-66) and to return requested group profiles to the packet gateway so that they can be locally cached (i.e. base station retrieves subscriber profiles from the central database and stores in the local cache database of the base station, see Zhang, col. 8, lines 7-21; lines 56-63).

f) As to claim 7, Zhang discloses the packet gateway includes a table operable to store one or more group profiles that may be locally cached (e.g. local subscriber list, see Zhang Fig. 4A; col. 9, lines 21-27; lines 39-47).

g) As to claim 8, Zhang discloses a method for executing authentication in a network environment (i.e. users are authenticated see Zhang, col. 8, lines 56-59) comprising: retrieving a group profile (e.g. local subscriber list includes a plurality of local subscriber cache entries, each being associated with a subscriber, see Zhang, Fig. 4A, element 150; col. 21-38) from an authentication, authorization, and accounting (AAA) server (e.g. central database system includes a subscriber management system, a billing system and a network management system, see Zhang col. 7, line 62 to col. 8, line 21) in response to receiving a request from a first end user (i.e. a subscriber signs on to the network, see Zhang col. 8, lines 40-45; base station retrieve subscriber profile from the central database, see Zhang, col. 8, lines 51-55); locally caching the group profile (i.e. the profile is stored in a local cache database of the base station, see Zhang, Fig. 3B, element 132); providing a service to the first end user based on information included within the group profile and associated with the first end user (see Zhang, col. 8, lines 56-60); receiving a request from a second end user (i.e. Zhang discloses managing subscriber profile information associated with each of a plurality of mobile

hosts of the network (Fig. 3A, element 120), so inherently understood there are requests from a plurality of mobile hosts, see Zhang col. 30, lines 11-14) and to determining if the second end user is included within the group profile such that in cases where the second end user is included in the group profile (i.e. base station searches local profile list to determine whether the profile associated with the new host is found in the local subscriber list, if so the base station reads the profile associated with the new host from the local cache database, see Zhang Fig. 10A, elements 1004, 1006, 1008; col. 30, lines 25-34), the group profile can be locally cached in order to provide a service to the second end user without having to communicate with the AAA server (see Zhang col. 5, lines 34-41; col. 8, lines 12-19).

h) As to claim 10, Zhang discloses if the second end user is not in the group profile associated with the first end user, then a request is communicated to the AAA server in order to attempt to identify a profile associated with the second end user (i.e. if it is determined that the new host is not found, the base station requests a copy of the subscriber profile associated with the new host from the central data base, see Zhang, col. 32, lines 18-24).

i) As to claim 11, Zhang discloses the group profile associated with the first end user is maintained at the owner base station for a period of time before the group profile is expired and deleted by the base station (i.e. it is understood the group profile has expiration time and is later identified as having expired) and the purpose of maintaining the group profile after the subscriber has signed off from the network is to avoid having to query the central database in the event the subscriber turns the handset

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back on after a short period of time (i.e. it is understood if the group profile associated with the first end user is expired, the base station needs to query the central database for a valid profile that corresponds to the first end user) (see Zhang col. 11, lines 15-32).

j) As to claim 12, Zhang discloses storing a plurality of group profiles (i.e. storing subscriber profile information associated with each subscriber of the network, see Zhang, col. 7, lines 62-66) and to return requested group profiles such that they can be locally cached (i.e. base station retrieves subscriber profiles from the central database and stores in the local cache database of the base station, see Zhang, col. 8, lines 7-21; lines 56-63).

k) As to claim 13, Zhang discloses a system for executing authentication in a network environment (i.e. users are authenticated see Zhang, col. 8, lines 56-59) comprising: means for retrieving a group profile (e.g. local subscriber list includes a plurality of local subscriber cache entries, each being associated with a subscriber, see Zhang, Fig. 4A, element 150; col. 21-38) from an authentication, authorization, and accounting (AAA) server (e.g. central database system includes a subscriber management system, a billing system and a network management system, see Zhang col. 7, line 62 to col. 8, line 21) in response to receiving a request from a first end user (i.e. a subscriber signs on to the network, see Zhang col. 8, lines 40-45; base station retrieve subscriber profile from the central database, see Zhang, col. 8, lines 51-55); means for locally caching the group profile (i.e. the profile is stored in a local cache database of the base station, see Zhang, Fig. 3B, element 132), means for providing a

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service to the first end user based on information included within the group profile and associated with the first end user (see Zhang, col. 8, lines 56-60); means for receiving a request from a second end user (i.e. Zhang discloses managing subscriber profile information associated with each of a plurality of mobile hosts of the network (Fig. 3A, element 120), so inherently understood there are requests from a plurality of mobile hosts, see Zhang col. 30, lines 11-14); and means for determining if the second end user is included within the group profile such that in cases where the second end user is included in the group profile (i.e. base station searches local profile list to determine whether the profile associated with the new host is found in the local subscriber list, if so the base station reads the profile associated with the new host from the local cache database, see Zhang Fig. 10A, elements 1004, 1006, 1008; col. 30, lines 25-34), the group profile can be locally cached to provide a service to the second end user without having to communicate with the AAA server (see Zhang col. 5, lines 34-41; col. 8, lines 12-19).

l) As to claim 15, Zhang discloses if the second end user is not in the group profile associated with the first end user, then a request is communicated to the AAA server in order to attempt to identify a profile associated with the second end user (i.e. if it is determined that the new host is not found, the base station requests a copy of the subscriber profile associated with the new host from the central data base, see Zhang, col. 32, lines 18-24).

m) As to claim 16, Zhang discloses the group profile associated with the first end user is maintained at the owner base station for a period of time before the group

profile is expired and deleted by the base station (i.e. it is understood the group profile has expiration time and is later identified as having expired) and the purpose of maintaining the group profile after the subscriber has signed off from the network is to avoid having to query the central database in the event the subscriber turns the handset back on after a short period of time (i.e. it is understood if the group profile associated with the first end user is expired; the base station needs to query the central database for a valid profile that corresponds to the first end user) (see Zhang col. 11, lines 15-32).

n) As to claim 17, Zhang discloses means for storing a plurality of group profiles (i.e. storing subscriber profile information associated with each subscriber of the network, see Zhang, col. 7, lines 62-66) and means for returning requested group profiles such that they can be locally cached (i.e. base station retrieves subscriber profiles from the central database and stores in the local cache database of the base station, see Zhang, col. 8, lines 7-21; lines 56-63).

o) As to claim 18, Zhang discloses software for executing authentication in a network environment (i.e. users are authenticated see Zhang, col. 8, lines 56-59; col. 30, lines 9-11) the software being embodied in a computer readable medium and comprising computer code such that when executed is operable to: retrieve a group profile (e.g. local subscriber list includes a plurality of local subscriber cache entries, each being associated with a subscriber, see Zhang, Fig. 4A, element 150; col. 21-38) from an authentication, authorization, and accounting (AAA) server (e.g. central database system includes a subscriber management system, a billing system and a

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network management system, see Zhang col. 7, line 62 to col. 8, line 21) in response to receiving a request from a first end user (i.e. a subscriber signs on to the network, see Zhang col. 8, lines 40-45; base station retrieve subscriber profile from the central database, see Zhang, col. 8, lines 51-55); locally cache the group profile (i.e. the profile is stored in a local cache database of the base station, see Zhang, Fig. 3B, element 132); provide a service to the first end user based on information included within the group profile and associated with the first end user (see Zhang, col. 8, lines 56-60); receive a request from a second end user (i.e. Zhang discloses managing subscriber profile information associated with each of a plurality of mobile hosts of the network (Fig. 3A, element 120), so inherently understood there are requests from a plurality of mobile hosts, see Zhang col. 30, lines 11-14) and determine if the second end user is included within the group profile such that in cases where the second end user is included in the group profile (i.e. base station searches local profile list to determine whether the profile associated with the new host is found in the local subscriber list, if so the base station reads the profile associated with the new host from the local cache database, see Zhang Fig. 10A, elements 1004, 1006, 1008; col. 30, lines 25-34), the group profile can be locally cached in order to provide a service to the second end user without having to communicate with the AAA server (see Zhang col. 5, lines 34-41; col. 8, lines 12-19).

p) As to claim 20, Zhang discloses if the second end user is not in the group profile associated with the first end user, then a request is communicated to the AAA server in order to attempt to identify a profile associated with the second end user (i.e. if

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it is determined that the new host is not found, the base station requests a copy of the subscriber profile associated with the new host from the central data base, see Zhang, col. 32, lines 18-24).

q) As to claim 21, Zhang discloses the group profile associated with the first end user is maintained at the owner base station for a period of time before the group profile is expired and deleted by the base station (i.e. it is understood the group profile has expiration time and is later identified as having expired) and the purpose of maintaining the group profile after the subscriber has signed off from the network is to avoid having to query the central database in the event the subscriber turns the handset back on after a short period of time (i.e. it is understood if the group profile associated with the first end user is expired, the base station needs to query the central database for a valid profile that corresponds to the first end user) (see Zhang col. 11, lines 15-32).

r) As to claim 22, Zhang discloses store a plurality of group profiles (i.e. storing subscriber profile information associated with each subscriber of the network, see Zhang, col. 7, lines 62-66) and return requested group profiles such that they can be locally cached (i.e. base station retrieves subscriber profiles from the central database and stores in the local cache database of the base station, see Zhang, col. 8, lines 7-21; lines 56-63).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 9, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang (US 6,810,259) in view of Basquin (6,925,560).

a) As to claim 2, Zhang discloses the group profile includes a plurality of end users (see Zhang, Fig. 4A, element 152) with each of end user cache entry including a subscriber key field for storing a subscriber key value comprising the telephone number of the associated subscriber and the manufacturers ID (i.e. mobile station identifier) of the associated one of the mobile hosts (see Zhang, col. 9, lines 39-56). Zhang is silent on the capability of the group profile shares a common prefix associated with their mobile station identifiers. Basquin is relied on for the teaching of the group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers, see Basquin col. 10, lines 27-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers in the

system of Zhang, as Basquin teaches so as to provide efficient authentication (see Basquin, col. 2, lines 52-59).

b) As to claim 9, Zhang discloses the group profile includes a plurality of end users (see Zhang, Fig. 4A, element 152) with each of end user cache entry including a subscriber key field for storing a subscriber key value comprising the telephone number of the associated subscriber and the manufacturers ID (i.e. mobile station identifier) of the associated one of the mobile hosts (see Zhang, col. 9, lines 39-56). Zhang is silent on the capability of the group profile shares a common prefix associated with their mobile station identifiers. Basquin is relied on for the teaching of the group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers, see Basquin col. 10, lines 27-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers in the system of Zhang, as Basquin teaches so as to provide efficient authentication (see Basquin, col. 2, lines 52-59).

c) As to claim 14, Zhang discloses the group profile includes a plurality of end users (see Zhang, Fig. 4A, element 152) with each of end user cache entry including a subscriber key field for storing a subscriber key value comprising the telephone number of the associated subscriber and the manufacturers ID (i.e. mobile

station identifier) of the associated one of the mobile hosts (see Zhang, col. 9, lines 39-56). Zhang is silent on the capability of the group profile shares a common prefix associated with their mobile station identifiers. Basquin is relied on for the teaching of the group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers, see Basquin col. 10, lines 27-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers in the system of Zhang, as Basquin teaches so as to provide efficient authentication (see Basquin, col. 2, lines 52-59).

d) As to claim 19, Zhang discloses the group profile includes a plurality of end users (see Zhang, Fig. 4A, element 152) with each of end user cache entry including a subscriber key field for storing a subscriber key value comprising the telephone number of the associated subscriber and the manufacturers ID (i.e. mobile station identifier) of the associated one of the mobile hosts (see Zhang, col. 9, lines 39-56). Zhang is silent on the capability of the group profile shares a common prefix associated with their mobile station identifiers. Basquin is relied on for the teaching of the group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers, see Basquin col. 10,

lines 27-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having group profile shares a common prefix with their mobile station identifiers (i.e. the predetermined field is a prefix of the subscriber number MSIN (Mobile Subscriber Identification Number) that is common to a group of subscribers in the system of Zhang, as Basquin teaches so as to provide efficient authentication (see Basquin, col. 2, lines 52-59).

Conclusion

6. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


mdn